

WILDERNESS EVALUATION

Lookout Mountain - 608028

6,055 acres

OVERVIEW

History

The 2006 inventory identified this area as meeting the criteria for a potential wilderness area (PWA) as described in Forest Service Handbook (FSH) 1909.12, Chapter 70. It had not been identified in any previous inventory. The following chart depicts the current 1989 Okanogan Forest Land and Resource Management Plan direction for the 2006 potential wilderness area.

Table 1--Management area percentages (rounded)

Okanogan National Forest	
MA39 Wildlife Diversity Habitat	MA47 Timber/ Range
38%	62%

Location and Access

The area is located southwest of Twisp in the central-western portion of the Methow Valley Ranger District, Okanogan-Wenatchee National Forest. It is entirely in Okanogan County. Access from Twisp is via the Lookout Mountain, Poorman Creek, or Libby Creek Road.

Geography and Topography

The area consists of a major ridge with minor ridges running northwest into the Poorman Creek Drainage. Elevations range from 2200 feet along Poorman Creek to 5575 feet on Lookout Mountain.

Current Uses

Primary recreational activities are hunting throughout the area and hiking to Lookout Mountain via Lookout Mountain trail. Lookout Mountain trail also receives some horseback, mountain bike and motorbike use.

Most of the area is within the Poorman and Libby Cattle Allotments. There is a Forest Service lookout on Lookout Mountain that is occasionally staffed, and which is maintained with motorized equipment.

Appearance and Surroundings

The north side of the area is common forested area with openings along the ridge tops. The south side has open slopes with forested drainages. A portion of the area was burned in the Poorman Creek Fire in 1994. There are areas which were helicopter logged in the Poorman Salvage and Poverty Timber Sales in the 1990s within the PWA. The area adjoins private and state land along the northern boundary.

Key Attractions (if any)

The key attraction is the lookout on Lookout Mountain.

CAPABILITY FOR WILDERNESS

Level of Natural and Undeveloped Environment

The natural appearance of the PWA is affected by the presence of a lookout, range developments, and timber harvest units. On adjacent and nearby non-Forest Service lands, timber harvest and past mining activities create a modified appearance.

Water quality data is not available for most of the PWA; however, due to the relatively moderate level disturbance water quality is assumed to be good. There may be localized disturbances due to grazing activities.

The Lookout Mountain PWA is impaired by light pollution from the Twisp and Winthrop areas. The southernmost portion of the PWA (15 percent of the PWA) rates a Class 2 on the Bortle Scale, whereas the northern portion (2 percent of the PWA) rates as a Class 4 with the central portion (83 percent of the PWA) rating a Class 3. A Class 2 Typical Truly Dark Sky represents the darkest skies viewed in the continental United States. The summer Milky Way is highly structured to the unaided eye. Any clouds in the sky are visible only as dark holes or voids in the starry background. No light domes from population centers are visible. A Class 3 Rural Sky has some indication of light pollution on the horizon. Clouds may appear faintly illuminated in the brightest parts of the sky near the horizon, but are dark overhead. The Milky Way still appears complex. Light domes from population centers may appear on the horizon (10-15 degrees above horizon). Visual observing is still relatively unimpaired. Time lapse photography could be impaired by light pollution. A Class 4 Rural/Suburban Transition Sky exhibits fairly obvious light-pollution domes over population centers in several directions. The Milky Way well above the horizon is still impressive but lacks all but the most obvious structure. Clouds in the direction of light pollution sources are illuminated but only slightly so, and are still dark overhead. Modest to serious impact to deep sky observing and imaging occurs.

Level of Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation

Due to the small size and proximity to roads, the opportunities for unconfined recreation with a high degree of challenge and risk are low. The sense of remoteness is also low due to the small size and the presence of human impacts throughout the area. With the current pattern of low use, the opportunity for solitude is high.

Special Features

The Lookout Mountain lookout is a historic structure.

Manageability of Boundaries

The northwestern boundary follows contours above roads and would be difficult to recognize on the ground. The boundary offers no barriers to prohibited uses.

AVAILABILITY FOR WILDERNESS

Recreation

The Lookout Mountain trail is open to hiking, horseback riding, mountain biking, and motor biking. The trail receives low use, with hikers as the primary users. The trail is not regularly maintained. Hunting is a popular activity throughout the area during the modern firearm general season.

Table 2--Miles of recreation trails

Motorized Trails	Non-motorized Trails	Snowmobile Trails
4	0	0

Wildlife

The area provides suitable habitat for the gray wolf (federally listed as endangered), the grizzly bear, northern spotted owl, and bald eagle (federally listed as threatened), and the wolverine and gray flycatcher (listed by the Forest Service as a sensitive species). Open, south-facing slopes with bitterbrush and other shrubs provide vital winter forage for deer. Mixed conifer old growth in the area provides productive habitat for several species of wildlife. Snag habitat for cavity dwellers is abundant due to recent insect and disease outbreaks.

Each PWA provides varying levels of habitat for focal wildlife species. To help evaluate the habitat that this PWA provides, the following information was provided: the focal species emphasized in the area, the amount of habitat for each focal species, the priority ranking for the habitat (based on conservation assessments and recovery plans), and the proportion of the total habitat available on the Forest that is within this particular PWA.

Table 3--Availability of habitat for federally listed Threatened and Endangered wildlife species, and R6 focal species

Wildlife Species	Acres of Habitat	Habitat Priority Ranking (1=high, 2=mod., 3=low)	%Total Forest Habitat in Evaluation Area
Grizzly bear	4,300	2	<1
Wolverine	3,984	2	<1

Water/Fish

The Lookout Mountain PWA is located in the Methow subbasin (4th HUC). The PWA is primarily located in two subwatersheds (6th HUC): Libby Creek and lower mainstem

Twisp River. Acreage in the PWA for both drainages is less than one-fifth of each subwatershed. Libby Creek and lower mainstem Twisp River subwatersheds have some changes in expected vegetation conditions and some road effects. When vegetation conditions and road related effects are considered cumulatively, these subwatersheds were rated fair.

Streams in these subwatersheds support federally threatened summer steelhead and subsequently are designated as critical habitat. Westslope cutthroat are present in the Libby Creek watershed. Water quality and aquatic habitat in the potential wilderness area is good and is an important water source to downstream reaches.

Water uses in these drainages includes fish and wildlife habitat, livestock watering, recreation, and irrigation. There are no existing power withdrawals, proposed impoundments, or known federal energy regulatory commission permits or licenses outstanding.

Range

Most of the Poorman allotment and a portion of the Libby Allotment are within this area. The Poorman Allotment is permitted from 5/16-9/30 with 44 cow/calf pairs for 265 animal unit months (AUMs). The Libby Allotment is permitted from 5/16-9/30 with 84 cow/calf pairs for 506 AUMs. Both of these allotments are managed in conjunction with other allotments where the numbers are combined to graze more cattle for a shorter period of time. Typically, the Poorman Allotment is stocked with 127 cattle for 48 days within the permitted season of use. The Libby Allotment is stocked with 230 cattle every other year for 90 days within the permitted season of use. There is a fence and water developments within the area. Permittees are allowed to maintain fences and water developments with motorized equipment and are allowed motorized access within the area.

Table 4--Grazing suitability and current allotments

Percent Area Suitable for Cattle Grazing	Percent Area Currently in Cattle Allotments	Percent Area Suitable for Sheep Grazing	Percent Area Currently in Sheep Allotments
10	96	66	0

Vegetation and Ecology

Dry Douglas-fir and ponderosa pine forest dominate the area. The area is currently available for vegetation management. Wilderness designation would eliminate vegetation management activities. Options to utilize mechanical treatments to manage vegetation would be precluded. Generally, the priority for restoration treatments occurs within the wildland urban interface (WUI) or within the dry and mesic forest groups. Because WUI represents 42 percent of the potential wilderness area, the prohibition on restorative treatments is a concern. The concern is increased, however, by recognizing that dry forest occupies over 85 percent of the area.

Timber Harvest Suitability

The underlying criteria for determining timber harvest suitability are found in the Forest and Rangeland Renewable Resources Planning Act of 1974, 36CFR219.12, and Forest Service Handbook 1909.12, Chapter 60.

For the Colville and Okanogan-Wenatchee National Forests, the general criteria for timber suitability that will be used for timber harvest suitability are:

- Is it forest land (10 percent crown cover minimum, productivity >20 ft³/ac/yr).
- The area has not been withdrawn from timber harvest or production.
- Soil, slope, or other watershed conditions will not be irreversibly damaged (based on soil attributes for erosion, instability, or compaction potential, slopes >65 percent, and certain land types)
- Reforestation can be assured within five years (lack of shallow soils, low frost heave potential, low surface rock, plant community type, certain land types, and elevation <5,500 feet)
- Economic and technologic viability (< 0.5 miles from existing transportation system, species value or condition, volume availability, logging systems)

In consideration of all the criteria for determining timber harvest or timber production suitability and not just the fact that harvestable species can grow at a specific location, it appears this PWA does not have conditions that pass all the criteria. The main criterion for failure is that unacceptable resource impacts would likely occur due to road construction activities. This does not preclude helicopter operations that could fly material over sensitive areas to adjacent road systems. However, in most if not all cases helicopter logging and the associated expenses (such as manual slash treatments) would not be an economically viable option.

Table 5--Stand data percentages

Suitable for Timber Harvest	Forest Groups		WUI	
0%	Parkland	0%	Total WUI	42%
	Cold Dry	0%	WUI in Dry and Mesic Forest	91%
	Cold Moist	2%		
	Mesic	0%		
	Dry	86%		
	Non-forest	12%		

Fire

There are portions of the area that have been prescribed burned. Due to the small size of the area and close proximity to Twisp and private land, wildland fire use would not be a viable strategy.

Insects and Disease

The Wilderness Act of 1964 allows for the control of insects and disease, but taking such actions in wilderness is rare. Forest Service wilderness policy (Forest Service Manual 2324.11) directs the agency “to allow indigenous insect and plant diseases to play, as nearly as possible their natural ecological role”. Policy also directs the agency to “protect the scientific value of observing the effect of insects and disease on ecosystems and identifying genetically resistant plant species”, and finally, “to control insect and plant disease epidemics that threaten adjacent lands or resources.”

An aerial survey for insects and disease was completed in 2007 in the vicinity of the Lookout Mountain PWA. The most extensive damaging agent detected was many small pockets of mountain pine beetle. More extensive damage has occurred further to the south in the Sawtooth. Mountain pine beetles can attack and kill many species of pines, but are most closely associated with lodgepole pine. Lodgepole pine stands that are older than 80 years, with an average diameter at breast height of eight inches or greater are highly likely to experience outbreaks. Additional risk factors are basal area over 120 square feet per acre, and low elevation.

Several hundred acres of defoliation by western spruce budworm was mapped in the PWA. Since light defoliation is difficult to detect from the area, usually only heavily defoliated areas are mapped. Ground surveys confirm that light to moderate defoliation extends well beyond the areas mapped by aerial survey. Western spruce budworm prefers to feed on grand fir and Douglas-fir, but will also feed on spruce, subalpine fir and western larch. Western spruce budworm populations have been increasing throughout the Forest since 1999. Given this overall trend, it is likely that the area will have heavier defoliation in 2008. Indirect control through silviculture is the most effective way of reducing budworm impacts over the long term. Stands with a large percentage of preferred host species will support an outbreak longer than stands with less host species. Multi-storied stands will also sustain outbreaks longer than single-storied stands, since they will provide dispersing larvae with readily available food and shelter from predators.

Threatened, Endangered, and Sensitive Plant Species

There are no known threatened, endangered, or sensitive plant species in the area.

Noxious Weeds

There are no documented noxious weed sites.

Minerals and Soils

The Lookout Mountain PWA is predominantly underlain by Jurassic and Cretaceous sedimentary and volcanic rocks associated with the Methow graben, an extensional down-dropped structural block. Historic prospecting and exploration has been focused in the eastern part of the PWA as indicated by historic mining claim records but there are no historic prospects or mines of significance within the PWA. Several mines with recorded production are located to the north and east of the subject lands. The majority of the area has a high potential for the occurrence of gold, silver, copper, lead, and zinc mineralization

associated with possible volcanogenic massive sulfide deposits (Grant, 1982). At present (5/2008), there are no active claims within the PWA.

The area has a low to moderate potential for the occurrence of coal and oil and gas resources and a low to moderate potential for geothermal resources. Lands within and adjacent to the PWA have been the subject of several oil and gas and geothermal leases or lease applications. However, those cases have since been relinquished or terminated and lands within the PWA are not the subject of any current expressions of interest, lease applications, or leases for coal, oil and gas, or geothermal resources.

Cultural and Heritage Resources

The Lookout Mountain lookout is a historic structure. Motorized tools are used for maintenance.

Land Uses and Special Uses

Range allotments are managed under term grazing permits.

Private Lands

There are no private lands within the area.

NEED FOR WILDERNESS

Location and size of other wildernesses in the general vicinity, and distance from area and population centers:

The area is approximately 23 air miles south of the Pasayten Wilderness (529,477 acres) and approximately five air miles east of the Lake Chelan-Sawtooth Wilderness (151,435 acres). The area is within four to six hours driving time from the greater Puget Sound area, three hours from Spokane, and two hours from Wenatchee.

A separate analysis identified where the PWAs could contribute to the wilderness recreation setting either by preserving the primitive recreation setting adjacent to existing wilderness, or by contributing assessable and attractive day use destinations (which are under heavy pressure in existing wilderness). The analysis also examined which PWAs would contribute either a unique landform to the wilderness system, or where trails access vegetation types that are underrepresented in wilderness at a regional scale.

In ranking this PWA for its potential to provide a high quality wilderness recreation setting it ranked as moderate. The area only contributes one very scenic trail that is likely to be attractive to day users; however, the area also contributes vegetative cover that is underrepresented in wilderness at a regional scale.

Present visitor pressure on other wildernesses, trends, and changing patterns of use:

Overall, there is a continuous, slight increase in the number of people visiting wilderness areas. The user groups showing the most increase are day-hikers in the Pasayten and Lake

Chelan-Sawtooth Wildernesses and day horse users in the Lake Chelan-Sawtooth Wilderness. There also appears to be a slight increase in off trail travel to specific destinations within these wilderness areas. There is also a trend to shorter multiple-day trips. In the past, eight to ten night trips were the most common, while the trips are now typically five to six consecutive nights. The addition of this area as wilderness would not be likely to draw increased use due to lack of key attractions relative to other areas nearby.

Extent to which non-wilderness lands provide opportunities for unconfined outdoor recreation experiences:

There are approximately 900,000 acres of National Forest System land outside of wilderness on the Methow Valley Ranger District. In the summer non wilderness portions of the district draw hikers, stock users, mountain bikers and more limited motorcycle use. Certain portions also offer regionally significant rock climbing and mountaineering. In the winter the area features outstanding cross-country, backcountry skiing, and snowmobiling.

The need to provide a sanctuary for those biotic species that have demonstrated an inability to survive in less than primitive surrounding or the need for a protected area for other unique scientific value or phenomena:

Wildlife

The area provides limited habitat for wide-ranging carnivores including grizzly bear and wolverine. These habitat values can be maintained by managing the area in an unroaded condition.

For American marten (*Martes Americana*), grizzly bear (*Ursus arctos*), wolverine (*Gulo gulo*), and Canada lynx (*Lynx Canadensis*) the wildlife sustainability index is 4.1 (a low relative ranking) and the habitat connectivity index is 5.3 (also low relative ranking).

Fish

Several native species in the interior Columbia River Basin have demonstrated an inability to survive in less than primitive surroundings, especially the bull trout. In addition to habitat changes on National Forest System lands, other factors off forest such as hydropower generation, hatchery programs, harvest, and changing ocean conditions further challenge the persistence of some far-ranging native species. Broad-scale assessments have demonstrated a positive correlation between unroaded areas and persisting native fish stocks. Often, assessments like these don't differentiate between wilderness and roadless areas; rather they combine the two into an "unroaded" category. These assessments show current strongholds (most secure and robust populations) are dependant on wilderness and roadless areas. Some of the more resilient native fish populations in the Interior Columbia Basin are located in unroaded areas on National Forest System lands.

For the Okanogan-Wenatchee National Forest PWAs were assigned an aquatic ranking based on federally listed and sensitive fish species that are sensitive to human disturbances. A high ranking was assigned when listed fish species occur in the PWA or when ecological process including high quality water help sustain listed fish species downstream of the

PWA. All other PWAs are ranked low. This PWA is assigned a high ranking based on these factors.

Rare Plant Species

An analysis was completed to prioritize which PWAs would contribute the most to providing refugia for those plant species on the species of interest/species of concern (SOI/SOC) list. The analysis ranked three factors. The first factor, the total number of sites occurring within the PWA, ranked as low for this PWA. The second factor, which also ranked as low for this PWA, examined the degree of rarity of any SOI/SOC species present, and also recognized the importance of individual PWAs in supporting a high incidence of populations relative to Washington state as a whole.

PWAs are generally unsurveyed for rare plants due to a relative lack of projects occurring in these areas. Thus an additional factor examined the potential for the PWA to support SOI/SOC species. Based on databases, first the SOI/SOC plant species were identified that are present within a five-mile radius of the PWA, but are not known to occur within the PWA. Then the PWA was analyzed to see if the potential habitat for these species occurs within the PWA. Based on this analysis, this PWA ranks as high.

Finally, a composite score was assigned to each PWA based on combining each of the rankings described above. This PWA ranks overall as moderate priority for preserving rare plant refugia with a wilderness designation.

Ability to provide for preservation of identifiable landform types and ecosystems:

Using Bailey's Ecoregion classification this area is in the East Cascades Ecoregion. Wilderness lands are well represented in the East Cascades Ecoregion.

An analysis compared vegetative cover types that are under-represented in wilderness on the National Forest System in Region 6 with those same cover types present in the PWA. Large-scale cover types were available through existing data layers and represent approximately 32 percent of the vegetative cover of this PWA (approximately 1,930 acres). These types include forb lands, non-alpine meadows, western red cedar, and ponderosa pine. Taken as a whole, the contribution of underrepresented vegetation types ranks as high for the portion of this area with underrepresented cover types, but as moderate for the number of acres that are represented within this PWA relative to the other PWAs in the planning area.

Some under-represented cover types fill microhabitats such as riparian areas or perched water tables. Such finer scale cover types represented in this PWA include sparse amounts of aspen.

In particular, the ponderosa pine and forb land would make a significant contribution within the eastern Washington planning area.